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TRANSMITTAL FORM

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Total Number of Pages In This Submission: 18

Application Number	10/035,783
Filing Date	December 24, 2001
First Named Inventor	Michael GRAUPE et al.
Art Unit	1626
Examiner Name	SHIAO, Rel Tsang
Attorney Docket Number	USAV2001/0081 US NP

ENCLOSURES *(Check all that apply)*

- ☐ Fee Transmittal Form
  - ☐ Fee Attached
- ☐ Amendment/Reply
  - ☐ After Final
  - ☐ Affidavits/declaration(s)
- ☐ Extension of Time Request
- ☐ Express Abandonment Request
- ☑ Information Disclosure Statement
- ☐ Certified Copy of Priority Document(s)
- ☐ Reply to Missing Parts/ Incomplete Application
  - ☐ Reply to Missing Parts under 37 CFR 1.52 or 1.53
- ☐ Drawing(s)
- ☐ Licensing-related Papers
- ☐ Petition
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- ☐ Power of Attorney, Revocation
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- ☐ CD, Number of CD(s) _____
  - ☐ Landscape Table on CD
- ☐ After Allowance Communication to TC
- ☐ Appeal Communication to Board of Appeals and Interferences
- ☐ Appeal Communication to TC **(Appeal Notice, Brief, Reply Brief)**
- ☐ Proprietary Information
- ☐ Status Letter
- ☑ Other Enclosure(s) (please identify below):
  1. Form 1449
  2. Transmittal of IDS Fee Form

Remarks

SIGNATURE OF APPLICANT, ATTORNEY, OR AGENT

Firm Name	AVENTIS PHARMACEUTICALS INC.		
Signature	Joseph D. Rossi		
Printed name	Joseph ROSSI		
Date	January 04, 2005	Reg. No.	47038

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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of
GRAUPE, et al.

Application No.: **10/035,783**

Filed: **12/24/2001**

Title: **Novel Compounds and Compositions As Cathespin Inhibitors**

Examiner: Robert Shaio

Art Unit: 1626

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INFORMATION DISCLOSURE STATEMENT UNDER 37 C.F.R. 1.56, 1.97 AND 1.98

Commissioner for Patents
P. O. Box 1450
Alexandria, VA 22313-1450

Applicants submit herewith patents, publications, and other information of which they are aware, which they believe may be material, as defined in 37 C.F.R. 1.56(b), to the examination of this application and in respect of which there may be a duty to disclose in accordance with 37 C.F.R. 1.56(a). While the information referred to in this Information Disclosure Statement may be material pursuant to 37 C.F.R. 1.56(b), the filing of this Information Disclosure Statement is not intended to, pursuant to 37 C.F.R. 1.97(h), constitute an admission that any patent, publication or other information referred to is, or is considered to be, material to the patentability of this invention. Pursuant to 37 C.F.R. 1.97(g), the filing of this Information Disclosure Statement shall not be construed to mean that a search has been made or that no other material information exists.

☐ (a) This Information Disclosure Statement is filed within the period set forth in §1.97(b) because it accompanies the new patent application submitted herewith, is filed within three months of the filing date of a national application or within three months of the date of entry of the national stage as set forth in §1.491 in an international application, or is believed to be filed before the mailing date of a first Office Action on the merits, whichever event occurs last. However, in the event that the first office action has been mailed, the Commissioner is authorized to charge any fees under 37 C.F.R. 1.17(p) or credit any overpayment to Account No. **18-1982**.

☒ (b) This Information Disclosure Statement is filed after the period set forth in 37 C.F.R. 1.97(b), but is believed to be filed before the mailing date of a final action under §1.113 or a notice of allowance under §1.311, whichever occurs first.

☐ (1) The undersigned attorney certifies that each item of information contained in this Information Disclosure Statement was cited in a communication from a foreign patent office in a counterpart foreign application not more than three months prior to the filing of this statement;

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☒ (3) This Information Disclosure Statement is accompanied by a transmittal letter in which payment of the fee set forth in §1.17(p) and required by 37 C.F.R. 1.97(c) is authorized.

A concise explanation of the relevance of some or all of the items listed on the attached PTO-1449 (modified) is as follows:

The items listed on pages 1 –13 of the attached PTO-1449 have been previously submitted to the Patent Office or cited by the Examiners during the prosecution of the following patents or patent applications commonly owned by the assignees of record of the present case:
U.S. Patent Nos. 6,576,630, 6,506,733, 6,455,502 and 6,492,362; and
U.S. Patent Application Nos. 10/183,128, 10/294,526, 10/719,080, 10/787,367, 10/418,183 and US02/17922 (PCT application filed in the U.S. receiving office).

Therefore, a copy of the reference is not enclosed with this Information Disclosure Statement. However, the applicant will furnish a copy of any listed reference, if so requested by the Examiner.

Respectfully submitted,

Joseph D. Rossi, Reg. No. 47,038
Attorney/Agent for Applicant

Aventis Pharmaceuticals Inc.
Patent Department
Route #202-206 / P.O. Box 6800
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Aventis Docket No. USAV2001/0081 US NP

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of
GRAUPE, et al.

Application No.: **10/035,783**

Filed: **12/24/2001**

Title: **Novel Compounds and Compositions As Cathespin Inhibitors**

Examiner: Robert Shaio

Art Unit: 1626

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Respectfully submitted,

Joseph D. Rossi, Reg. No. 47,038
Attorney/Agent for Applicant

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INFORMATION DISCLOSURE STATEMENT BY APPLICANT

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Sheet 1 of 13

Complete if Known	
Application Number	10/035,783
Filing Date	12/24/2001
First Named Inventor	GRAUPE
Group Art Unit	1626
Examiner Name	Shaio
Attorney Docket Number	USAV2001/0081 - US - NP

U.S. PATENT DOCUMENTS

Examiner Initials*	Cite No.[1]	U.S. Patent Document Number	Kind Code[2] (if known)	Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		4,927,809		STUBER, et al.	05-22-1990	
		5,424,325		ANDO, et al.	06-13-1995	
		5,486,623		ZIMMERMAN, et al.	01-23-1996	
		5,498,616		MALLANO, et al .	03-12-1996	
		5,847,135		BEMIS, et al.	12-08-1998	
		5,852,007		CHATTERJEE, et al.	12-22-1998	
		5,874,424		BATCHELOR, et al.	02-23-1999	
		5,998,390		RAMAMURTHY, et al.	12-07-1999	
		6,004,933		SPRUCE, et al.	12-21-1999	
		6,022,861		SCARBOROUGH, et al.	02-08-2000	
		6,114,310		CHAMBERLAND, et al.	09-05-2000	
		6,124,333		MILLER, et al.	12-26-2000	
		6,255,453		GYORKOS	07-03-2001	
		6,353,017		ALTMAN, et al.	03-05-2002	
		6,455,502		BRYANT, et al.	09-24-2002	
		6,476,026		BRYANT, et al.	11-05-2002	
		6,492,362		GRAUPE, et al.	12-10-2002	
		6,506,733		BUYSSE	01-14-2003	
		6,576,630		LINK, et al.	06-10-2003	

FOREIGN PATENT DOCUMENTS

Examiner Initials*	Cite No.[1]	Foreign Patent Document Office[3]	Number[4]	Kind Code[5] (if known)	Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T[6]
		EP	EP 0272671		KRANTZ, et al.	06-29-1988		
		EP	EP 0291234		EDWARDS, et al.	11-17-1988		
		EP	EP 0355572		PAQUES, et al.	02-28-1990		
		EP	EP 0376012		ALBRIGHT, et al.	07-04-1990		
		EP	EP 0419683		HARA, et al.	04-03-1991		
		EP	EP 0536399		OKUBO, et al.	04-01-1993		
		EP	EP 0652009		DOVEY, et al.	10-05-1995		
		EP	EP 0754454		KOBAYASHI, et al.	01-22-1997		
		JP	JP 06192199		RYOICHI, et al.	07-12-1994		
		JP	JP 42009133		IRIKURA, et al.	05-06-1967		

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INFORMATION DISCLOSURE STATEMENT BY APPLICANT

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Sheet 2 of 13

Complete if Known	
Application Number	10/035,783
Filing Date	12/24/2001
First Named Inventor	GRAUPE
Group Art Unit	1626
Examiner Name	Shaio
Attorney Docket Number	USAV2001/0081 - US - NP

U.S. PATENT DOCUMENTS

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		10/035,783		GRAUPE, et al.	12-24-2001	
		10/719,080		GRAUPE, et al.	11-21-2003	
		US02/17922		GRAUPE, et al.	11-24-2003	
		10/787,967		GRAUPE, et al.	9-16-2002	
		10/418,183		LI, et al.	10-23-2003	

FOREIGN PATENT DOCUMENTS

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		JP	JP 63303868		YOSHIDA, et al.	12-08-1988		
		WO	WO 00/46992		TUCKER, et al.	08-24-2000		
		WO	WO 00/49007		TUCKER, et al.	08-24-2000		
		WO	WO 00/49008		TUCKER, et al.	08-24-2000		
		WO	WO 00/51998		CYWIN, et al.	09-08-2000		
		WO	WO 00/59881		SINGH, et al.	10-12-2000		
		WO	WO 00/69855		QUIBELL, et al.	11-23-2000		
		WO	WO 01/09110		BEKKALI, et al.	02-08-2001		
		WO	WO 01/19796		GRAUPE, et al.	03-22-2001		
		WO	WO 01/19808		GRAUPE	03-22-2001		

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Sheet 3 of 13

Complete if Known	
Application Number	10/035,783
Filing Date	12/24/2001
First Named Inventor	GRAUPE
Group Art Unit	1626
Examiner Name	Shaio
Attorney Docket Number	USAV2001/0081 - US - NP

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		WO	WO 01/19816		EMMANUEL, et al.	03-22-2001		
		WO	WO 01/30772		TUCKER, et al.	05-03-2001		
		WO	WO 01/55125		BOZSING, et al.	08-02-2001		
		WO	WO 01/58886		MISSBACH, M	08-16-2001		
		WO	WO 95/13069		MORRIELLO, et al.	05-18-1995		
		WO	WO 95/15309		JENKINS, et al.	06-08-1995		
		WO	WO 95/24382		HALLINAN, et al.	09-14-1995		
		WO	WO 96/21655		PEET, et al.	07-18-1996		
		WO	WO 96/30353		PALMER, et al	10-03-1996		
		WO	WO 96/40647		ZIMMERMAN, et al.	12-19-1996		

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INFORMATION DISCLOSURE STATEMENT BY APPLICANT

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Sheet 4 of 13

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Application Number	10/035,783
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Group Art Unit	1626
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		WO	WO 96/40744		MARLOWE, et al.	12-19-1996		
		WO	WO 96/41638		DOLLE, et al.	12-27-1996		
		WO	WO 97/03679		MALLANO, et al.	02-06-1997		
		WO	WO 98/01133		AIBE, et al.	01-15-1998		
		WO	WO 98/01428		DOMINGUEZ, et al.	01-15-1998		
		WO	WO 98/05336		MARQUIS, et al.	02-12-1998		
		WO	WO 98/08802		YAMASHITA, et al.	03-05-1998		
		WO	WO 98/08867		SHIONOGI, et al.	03-05-1998		
		WO	WO 98/21188		PRESTON, et al.	05-22-1998		
		WO	WO 98/23588		FLOYD, C.	06-04-1998		

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Sheet 5 of 13

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Group Art Unit	1626
Examiner Name	Shaio
Attorney Docket Number	USAV2001/0081 - US - NP

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		WO	WO 98/49190		SPRUCE, et al.	11-05-1998		
		WO	WO 99/24460		ALTMANN, et al.	05-20-1999		

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INFORMATION DISCLOSURE STATEMENT BY APPLICANT

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Sheet 6 of 13

Complete if Known	
Application Number	10/035,783
Filing Date	12/24/2001
First Named Inventor	GRAUPE
Group Art Unit	1626
Examiner Name	Shaio
Attorney Docket Number	USAV2001/0081 - US - NP

OTHER PRIOR ART – NON PATENT LITERATURE DOCUMENTS

Examiner Initials*	Cite No.[1]	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T[2]
		ADAMS, et al., Potent and Selective Inhibitors of the Proteasom: Dipeptidyl Boronic Acids, Bioganic & Medicinal Chemistry Letters, 8: 333-338 (1998).	
		ASHWORTH, et al., 4-Cyanothiazolidides as very potent, etable inhibitors of dipeptidyl peptidase IV, Bioorganic & Med. Chem. Letters, B,Oxford, 6(22):2745-2748 (1996).	
		BERGEMAN, et al., Studies on the reactivity of .alpha.-cyano.alpha-isocyano alkanoates. Versitile synthons for the assembly of imidazoles, Helv.Chim. ACTA, 82(6):909-918 (1999).	
		BILLSON, et al., The Design and Synthesis of Inhibitors of the Cysteinyl , Bioorg. Med. Chem. Lett. vol. 8, pp. 993-998, 1998	
		BROMME, et al., Potent Inactivation of Cathepsins S and L , Biol. Chem. Hoppe–Seyler. vol. 375, No. 5, pp. 343-347, 1994.	
		CHATTERJEE, et al., D-Amino Acid Containing, High-Affinity Inhibitors of Recombinant Human Calpain I, Journal of Medicinal Chemistry, vol. 41, No. 15, p: 2663-2666 (1998).	
		COHEN, et al., Therapy of relapsing multiple sclerosis. Treatment approaches for nonresponders, Journal of Neuroimmunology, 98: 29-36 (1999).	
		DUFOUR, et al., Engineering nitrile hydratase activity into a cysteine protease by a single mutation, Bio.chemistry, US, Am. Chem. Soc., Easton, PA, 34(50):16382-16388 (1995).	
		EDWARDS, et al., Design, Synthesis, and Kinetic Evaluation of a Unique Class of Elastase Inhibitors, the Peptidyl a-Ketobenzoxazoles, and the X-ray Crystal Structure of the Covalent Complex between Porcine Pancreatic Elastase and Ac-Ala-Pro-Val-2-Benzoxazole, Journal of American Chemical Society, vol. 114, No. 5, p 1854-1863 (1992).	
		EVOLI, et al., abstract only, Drugs, 1998, 52(5), 662-70	

Examiner Signature		Date Considered	

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Sheet 7 of 13

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Application Number	10/035,783
Filing Date	12/24/2001
First Named Inventor	GRAUPE
Group Art Unit	1626
Examiner Name	Shaio
Attorney Docket Number	USAV2001/0081 - US - NP

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Sheet 9 of 13

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		09/927,188		CAI, et al.	08-10-2001	
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		JP	JP 2001-011037		SATO, et al.	01-16-2001		
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		WO	WO00/59881		SINGH, et al.	10-12-2000		
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